

and 4, includes at least a first imaging optical system having a focal length  $f_1$  (refracting lens group or first dioptric imaging optical sub-system  $G_1(f_1)$ ) having a positive refractive power and for forming a first intermediate (i.e., primary) image 9 as a reduced image of the pattern on the object plane P1, beam splitting means 10 for splitting at least part of a light beam from the first imaging optical system, a second imaging optical system having a focal length  $f_2$  (catadioptric lens group or catadioptric imaging optical sub-system  $G_2(f_2)$ ) including a concave reflecting mirror  $M_1$  for reflecting a light beam split by the beam splitting means, and for forming a second intermediate (i.e., secondary) image 12 as an image of the first intermediate image 9, and a third imaging optical system having a focal length  $f_3$  (refracting lens group or second dioptric imaging optical sub-system  $G_3(f_3)$ ) for forming a third intermediate image (a final image) as an image of the second intermediate image 12 on the image plane P2 on the basis of a light beam, of a light beam from the second imaging optical system, which is split by the beam splitting means 10.--

Please amend the paragraph starting on page 2, col. 3, line 28 and ending on page 2, col. 3, line 39, as follows:

--If the beam splitting means is a partial reflecting mirror 13 (i.e., a turning mirror) for partially reflecting a light beam from the first imaging optical system (refracting lens group  $G_1(f_1)$ ) as shown in FIG. 5, the second intermediate image 12 is preferably formed in an optical path [form] from the first imaging optical system to the concave reflecting mirror  $M_1$  of the second imaging optical system and is located at the concave reflecting mirror side of the partial reflecting mirror 13. In other words, the intermediate image 12 is formed between the concave reflecting mirror  $M_1$  and the partial reflecting mirror 13. The partial reflecting mirror 13 is shown located off the optical axis of the catadioptric optical imaging sub-system  $G_2(f_2)$ , where the catadioptric optical axis intersects the optical axis of the second dioptric optical imaging sub-system  $G_3(f_3)$ --

#### **IN THE CLAIMS:**

Please **CANCEL** claims 1-43, and **ADD** claims 44-163, as follows:

44. (NEW) A catadioptric optical system comprising:

a first refractive optical sub-system;

a refractive-reflective optical sub-system;